

REMARKS

Applicant respectfully requests reconsideration and allowance of claims 2-5, 8-10, and 17-27, which are pending in the above-identified application. Claims 3-5, 8-10, and 17-26 stand rejected. Claims 4 and 5 stand withdrawn. Claim 17 is amended in this response while claim 2 is cancelled in this response. New claim 27 has been added. No new matter is added by the amendments. Support for the amendments may be found in at least FIGs. 5, 6 and paragraph [0029] of US 20040172021 which is a publication of the subject application. In view of the following discussion, Applicant submits that all pending claims are in condition for allowance.

I. Objection to the Drawings

On page 2 of the subject Office Action, the Examiner objected to the drawings contending that the drawings must show the middle component with the raised wing surface that tapers downwardly towards at least one outside edge of the middle component in complete view with the base component that is claimed. It is submitted that claim 25 is directed towards Fig. 7 and not Fig. 6 as erroneously noted on page 2 of the subject Office Action. Fig. 6 shows a bottom side 44 of the middle component 42 while Fig. 7 shows that top side 52 of the middle component 42. (See paragraphs [0017], [0018], and [0029] of US 20040172021 which is a publication of the subject application). The claimed raised wing surfaces 58 are clearly shown in Fig. 7 of US 20040172021. Additionally, it is submitted that the drawings are in accordance with 37 CFR 1.83(b) as Figs. 6 and 7 show the middle component 42 and other views of the base components are shown in Figs. 1-4. For example, Fig. 1 shows the bottom side of the superior base component 10 comprising a concave portion 12 to receive the convex portion 54 of the middle component 42. Thus it shows the connection of the middle component 42 to the base component 10. Similarly, Fig. 3 shows the top side of the inferior base component 34 comprising a plate portion 36 and a raised wall 38 that receive the lower side of the middle component 42 shown in Fig. 6. Thus, it is submitted that these figures together clearly show how the middle component connects with the inferior and superior base components and therefore, the figures satisfy all the stipulations of 37 CFR 1.83(b). Nowhere does the rule state that a complete assembly of all the components put together is

required as contended on page 3 of the subject Office Action.

II. Rejection of Claims 2, 3, 8, 9, 17, 18, 20 and 21 under 35 U.S.C. §103(a):

At pages 4-5 of the subject Office Action, the Examiner has rejected claims 2, 3, 8, 9, and 17-18, 20 and 21 under 35 U.S.C. §103(a) as being unpatentable over Mazda (WO 94/04100) in view of Alfaro et al. (U.S. 20010032017) and Michelson (U.S. 6120503). Withdrawal of this rejection is requested for at least the following reasons. The cited art, alone or in combination, fails to teach or suggest all aspects of the subject claims.

In general, the claimed subject generally relates to a system of reconstruction for a spinal joint that allows adjacent vertebrae to move relative to each other in a generally pivotal manner and in a limited sliding manner in either or both of the anterior-posterior direction and medial-lateral direction. To this end, independent claim 17 recites: "wherein the second base component and the middle component each comprises a slot having edges extending longitudinally from an anterior edge to a posterior edge of each respective component such that the second side of the second base component slideably receives the second side of the middle component." Mazda in view of Alfaro et al. and Michelson does not teach or suggest such claim aspects.

Mazda relates to prosthesis comprising two plates (1, 2) secured to the corresponding vertebrae (L4, L5) and a ball joint linking the plates to one another. The prosthesis includes an elastic intercalary cushioning ring (10) having an opening (10a) for the passage of the joint (3) and being lodged in the space delimited between the plates and around the joint. (*See, Mazda Abstract*). However, Mazda fails to teach or suggest the aspects "wherein the second base component and the middle component each comprises a slot having edges extending longitudinally from an anterior edge to a posterior edge of each respective component such that the second side of the second base component slideably receives the second side of the middle component", as recited in the independent claim 17. The complementary slots provided in the middle and the base component as claimed facilitate limited movement of the two components relative each other in a sliding manner in the anterior-posterior direction which is not facilitated by the ball joint disclosed by Mazda.

Throughout the subject Office Action, it is observed that various portions of Mazda were relied upon for rejection of different claims. For example, dependent claim 21 is rejected on page 5 of the subject Office Action based on Fig. 5 of Mazda. More particularly, the Examiner contends that Mazda discloses that the inner surface of the base component is raised and slidingly receives the middle component. It is respectfully submitted that the Abstract of Mazda, which is in English language, does not disclose such features of the prosthesis as contended. The remaining parts of of Mazda are not in English language. The Examiner seems to be relying on the description of Fig. 5 in order to support his rejection of claim 21. As Mazda is in a language other than English, and as the Examiner appears to be relying on the entire document, it is submitted that in accordance with MPEP Section 706.02 (II), a translation of the document must be provided by the Examiner so that the record is clear as to the precise facts the Examiner is relying upon in support of the rejection. Therefore, Applicant requests that, in case the Examiner persists with this rejection of the claims based on the specification of Mazda, then an English language translation of the text therein should be provided by the Examiner. Absent the above, Applicant requests that the Examiner cite other documents that show the claimed features, or in the alternative to withdraw this rejection of claims.

Alfaro et al. relates to a multipart intervertebral implant which includes an implant portion and an implant extender portion fastened together using known fastening means. The size of the implant extender portion can be selected during a surgical procedure to provide an implant suitable for a particular intervertebral receiving bed (*See, Alfaro Abstract*). In various embodiments, Alfaro et al. discloses an implant formed from a ring material having a top surface and a bottom surface, including a series of annular stepped surfaces, which together define a convex configuration which closely corresponds to the concave shape of the vertebral end plates. (*See, Alfaro et al. paragraph [0011]*). Thus, Alfaro et al. does not disclose an implant "wherein the second base component and the middle component each comprises a slot having edges extending longitudinally from an anterior edge to a posterior edge of each respective component such that the second side of the second base component slideably receives the second side of the middle component", as recited in the independent claim 17.

Michelson relates to a spinal fixation device for stabilizing one or more segments of the

human spine and for preventing the dislodgement of intervertebral spinal fusion implants, which remains permanently fixated once applied (See Michelson Abstract). However, Michelson also fails to teach or suggest the aforementioned aspects of the independent claim 17.

In view of at least the foregoing, it is clear that the cited documents, alone or in combination, do not teach or suggest all aspects of the subject claims. Therefore, this rejection should be withdrawn with respect to independent claim 17 and all claims depending therefrom.

III. Rejection of Claim 10 under 35 U.S.C. §103(a):

At pages 5-6 of the subject Office Action, the Examiner has rejected claim 10 under 35 U.S.C. §103(a) as being unpatentable over Mazda in view of Alfaro et al. and Michelson and further in view of Khandkar et al. (U.S. 2004032017). Withdrawal of this rejection is requested for at least the following reasons. The cited art, alone or in combination, fails to teach or suggest all aspects of the independent claim 17 from which claim 10 depends.

As discussed above, Mazda in view of Alfaro et al. and Michelson fails to teach or suggest a prosthetic assembly "wherein the second base component and the middle component each comprises a slot having edges extending longitudinally from an anterior edge to a posterior edge of each respective component such that the second side of the second base component slideably receives the second side of the middle component". Khandkar et al. discloses a total disc implant (TDI) provided for total replacement of a spinal disc or discs in a human patient. The TDI is designed to maintain a substantially full range of natural motion (ROM) following implantation. It generally comprises upper and lower end plates for affixation to adjacent vertebral bodies with an intervening insert disposed therebetween. The intervening insert defines a concave upper and lower part-cylindrical seats oriented for respectively engaging the cylindrical surfaces on the end plates. Therefore, Khandkar et al. does not disclose the second base component and the middle component as recited in claim 17.

In view of the foregoing, it can be concluded that the cited art does not teach or suggest all aspects of the independent claim 17. Hence, this rejection should be withdrawn with respect to this claim and all claims depending therefrom.

IV. Rejection of Claims 22-24 under 35 U.S.C. §103(a):

At pages 6-7 of the subject Office Action, the Examiner has rejected claims 22-24 under 35 U.S.C. §103(a) as being unpatentable over Mazda in view of Alfaro et al. and Michelson and further in view of Errico et al. (U.S. 6989032). Withdrawal of this rejection is requested for at least the following reasons. The cited art, alone or in combination, fails to teach or suggest all aspects of the independent claim 17 from which claims 22-24 depend.

As discussed above, Mazda in view of Alfaro et al. and Michelson fails to teach or suggest a prosthetic assembly, "wherein the second base component and the middle component each comprises a slot having edges extending longitudinally from an anterior edge to a posterior edge of each respective component such that the second side of the second base component slideably receives the second side of the middle component". Errico et al. relates to an artificial disc having a pair of opposing baseplates, for seating against opposing vertebral bone surfaces, separated by a ball and socket joint that includes a ball compression locked to a post extending from one of the base plates. The ball is captured within a curvate socket formed in a peak of a convex structure attached to the other of the baseplates. (*See, Errico et al. Abstract*). However, Errico et al. fails to make up for the aforementioned deficiency of the Mazda, Alfaro et al. and Michelson with respect to independent claim 17 as it does not teach or suggest the aforementioned aspects of claim 17. Hence, this rejection should be withdrawn with respect to claims 22-24 depending therefrom.

V. Rejection of Claims 25-26 under 35 U.S.C. §103(a):

At page 7 of the subject Office Action, the Examiner has rejected claims 25-26 under 35 U.S.C. §103(a) as being unpatentable over Mazda in view of Alfaro et al. and Michelson and

further in view of Buettner-Janz et al. (U.S. 4759766). Withdrawal of this rejection is requested for at least the following reasons. The cited art, alone or in combination, fails to teach or suggest all aspects of the independent claim 17 from which claims 25-26 depend.

As discussed above, Mazda in view of Alfaro et al. and Michelson fails to teach or suggest a prosthetic assembly, "wherein the second base component and the middle component each comprises a slot having edges extending longitudinally from an anterior edge to a posterior edge of each respective component such that the second side of the second base component slideably receives the second side of the middle component". Buettner-Janz et al. relates to an intervertebral disc endoprosthesis comprising two symmetrical, concave end plates with an intermediate convex spacing piece. The end plates and the spacing piece have a plane guide rim (*See*, Buettner-Janz et al. Abstract). However, Buettner-Janz et al. discloses various embodiments wherein the central spacing piece has two convex surfaces or wherein the spacing piece along with the adjacent surfaces correspond to partial surfaces of a cylinder with in each case equal to the radius of curvature of parts which are articulated with each other, and their directions or surfaces of movement are offset in relation to each other by 90 degrees. (*See*, Buettner-Janz et al. Fig. 2 and related description at col. 5 lines 5-9, Figs 10, 11 and related description at col. 5 lines 50-56). Thus, it is clear that Buettner-Janz et al. also fails to disclose a middle component as recited in independent claim 17. As the cited art does not teach or suggest all aspects of independent claim 17, this rejection should be withdrawn with respect to claims 25-26 depending therefrom.

VI. New Claim 27:

As established above, claim 17 is patentable over the cited prior art. As claim 27 depends from claim 17, and recite additional patentable features, the subject dependent claim is, therefore, likewise patentable.

Conclusion:

In view of the foregoing, Applicant submits that the instant claims are in condition for allowance. Early and favorable action is earnestly solicited. In the event there are any fees due and owing in connection with this matter, please charge same to our Deposit Account No. 11-0223.

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